

High-Performance Home Theater Receiver features full support for HD audio formats, HDMI video up-conversion and de-interlacing, iPod and Bluetooth audio compatibility, improved YPAO, Adaptive DRC (Dynamic Range Control), multi-zone custom installation facility, and four SCENE buttons.

DIGITAL
ToP·ART

Top·Art
Audio Reproduction Technology



1

High Sound Quality

- HD Audio format support: Dolby Digital Plus, Dolby Digital TrueHD, DTS-HD High Resolution Audio and DTS-HD Master Audio
- 7-channel 665W powerful surround sound (95W x 7)
- Digital ToP-ART and High Current Amplification
- Pure Direct for higher fidelity sound reproduction
- Burr-Brown 192kHz/24-bit DACs used in all channels
- Assignable amplifiers for bi-amp connection

2

Advanced Features

- 4 SCENE buttons offering greater operating ease (with 18 preset SCENE templates)
- XM ready with XM HD Surround powered by Neural Surround
- SIRIUS Satellite Radio ready
- Improved YPAO for automatic speaker setup
- iPod compatibility via Yamaha Universal Dock
- Bluetooth (A2DP) compatibility with Yamaha Bluetooth® Wireless Audio Receiver (YBA-10)
- Superior multi-zone control compatibility

3

High Picture Quality

- 1080p-compatible HDMI (2 in/1 out)
- Supports Deep Color (up to 36 bit), x.v.Color, a double speed Refresh Rates of 120Hz and 1080p/24Hz transmission, and Auto Lip-Sync compensation
- Analog video to HDMI digital video upconversion and deinterlacing with TBC

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Surround Realism

- Fine-tuned CINEMA DSP and Adaptive DSP level
- Improved Compressed Music Enhancer
- Adaptive DRC (Dynamic Range Control)

17 CINEMA DSP Programs

Compatible Decoder Straight

Dolby Digital
Dolby Digital EX
Dolby Digital Plus
Dolby Digital TrueHD
DTS Digital Surround
DTS 96/24
DTS-ES Matrix 6.1
DTS-ES Discrete 6.1
DTS-HD High Resolution Audio
DTS-HD Master Audio
Dolby Pro Logic
Dolby Pro Logic II Music
Dolby Pro Logic II Movie
Dolby Pro Logic II Game
Dolby Pro Logic IIx Music
Dolby Pro Logic IIx Movie
Dolby Pro Logic IIx Game
DTS Neo:6 Music
DTS Neo:6 Cinema
Neural Surround

CINEMA DSP Programs 17

CLASSICAL	Hall in Munich Hall in Vienna Chamber
LIVE/CLUB	Cellar Club The Roxy Theatre The Bottom Line
STEREO	7ch Stereo Sports
ENTERTAINMENT	Action Game Roleplaying Game Music Video Standard Spectacle
MOVIE	Sci-Fi Adventure Drama Mono Movie

HTR-6160BL 7.1-Channel Digital Home Theater Receiver

High Sound Quality

HD Audio Format Support

This receiver lets you enjoy the best possible and newest surround sound from both Blu-ray Disc players and HD-DVD players. It supports the two lossy formats: Dolby Digital Plus and DTS-HD High Resolution Audio, as well as the lossless formats: Dolby TrueHD and DTS-HD Master Audio.

Digital ToP-ART with Audio-Grade Parts and Devices Used Throughout

Yamaha's Digital ToP-ART (Total Purity of Audio Reproduction Technology) concept combines the latest and best technologies, parts and circuit designs to maximize sound quality. These include custom-made block capacitors (1), high grade Burr-Brown 192kHz/24-bit DACs and ADC (2) and other high quality audio-grade parts (3). High Current Amplification uses superior components to achieve high current power and low impedance from the power supply to the speaker terminals. The HTR-6160BL also has all channel discrete amplifier configuration.



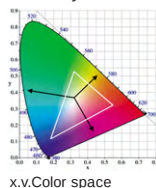
Pure Direct for Highest Sound Quality

Pure Direct is a special mode that causes the signal to bypass all but the most basic audio circuitry, and even turns off the display to prevent any chance of noise interference. It provides the purest possible high-fidelity sound for your music sources.

High Picture Quality

1080p-Compatible HDMI (2 In/1 Out)

The HDMI interface upgrades the transmission of standard, enhanced and high-definition signals via a single HDMI cable, providing extremely high video quality. Two HDMI inputs allow users to connect two high-definition sources such as Blu-ray Discs or HD-DVD players and switch between them. The HTR-6160BL also provides the benefits of Deep Color (30/36bit), the x.v.Color standard, automatic audio and video synchronization (Lip-Sync) capability and 1080p/24Hz support.



30- and 36-bit color depth (Deep Color, left) and current 24-bit depth (right): 30-bit color depth consists 4 times more shades of gray or more.



HDMI Video Up-conversion and De-interlacing

The HTR-6160BL provides analog video to HDMI digital up-conversion (composite video <-> S-Video <-> component video -> HDMI) and also analog video signals de-interlaced from 480i to 480p are output at HDMI terminal.

Advanced Features

SCENE — Greater Operating Ease

Four SCENE buttons make operating the receiver easier than ever. Pressing a SCENE button automatically turns the power on and launches a number of operations that initiate play of the source controlled by that button. Many SCENE settings are available, such as Dock Listening, DVD Viewing, Radio Listening and Game Playing (with 18 preset SCENE templates). Browsing and selecting the settings is quickly accomplished by rotating the input knob and watching the on-screen display. When a Yamaha DVD or CD player with SCENE compatibility is connected to the Remote Out jack, it can be operated via the receiver's SCENE functions.

Improved YPAO Sound Optimization

The HTR-6160BL has an improved YPAO system that automatically selects the crucial frequency bands for the listening room, and adjusts the level of the selected bands to create a cohesive sound field in the room. In addition, the YPAO Setup Menu appears when the YPAO mic is plugged in, so you can just run it using the system menu showing in the OSD without referring to the owner's manual.

Independent Operation of Zone 2

You can enjoy sound in a separate room (Zone 2) because the HTR-6160BL provides Zone 2 audio output. Furthermore, Zone 2 power amplifier assignability and speaker terminals mean that Zone 2 can be fully independent with its own 2-channel power, while you still enjoy 5.1-channel sound in the main room.

Surround Realism

Fine-Tuned CINEMA DSP and Adaptive DSP Level

Yamaha's much-praised CINEMA DSP programs have been fine-tuned for even better sound with the latest generation CINEMA DSP technology*. As a result, the source and the sound field are in closer harmony, providing a delightful new CINEMA DSP experience.

When volume is low, CINEMA DSP effects may be difficult to hear. Adaptive DSP Level overcomes this problem by evaluating the difference between the volume level and a reference level, and adjusting the DSP level to ensure optimum effectiveness, that is, the best possible sound.

(*Note: CINEMA DSP programs are not compatible with Dolby TrueHD, Dolby Digital Plus, DTS-HD Master Audio and DTS-HD High Resolution Audio.)

Improved Compressed Music Enhancer

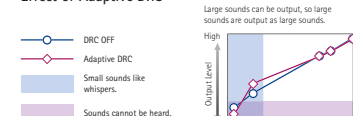
Yamaha's Compressed Music Enhancer is a popular

feature that restores the sound of the original music from digitally compressed formats such as MP3. This receiver offers an upgraded version that processes multi-channel signals with a DSP algorithm, so all channels (rather than just two) are enhanced. This provides more accurate reproduction and a more expansive sound.

Adaptive DRC

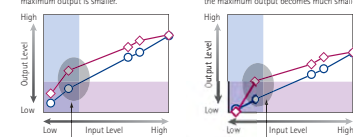
Adaptive DRC (Dynamic Range Control) is a new volume control technology that is effective for low-volume listening, such as at night or with headphones. It applies DRC processing to eliminate the volume differences between loud commercials and ordinary programming and to take into account our ears' loss of sensitivity as volume decreases.

Effect of Adaptive DRC



Volume at Normal Level

Large sounds can be output, so large sounds are output as large sounds.



Other Notable Features

- XM Satellite Radio ready with XM HD Surround powered by Neural Surround
- SIRIUS Satellite Radio ready
- 40-station preset tuning / Auto preset tuning
- HD Audio LPCM 7.1-channel reception (up to 192kHz)
- High dynamic power and Linear Damping
- Low Jitter PLL Circuitry
- Assignable amplifiers for bi-amp connection
- Initial Volume and Maximum Volume Setting
- iPod song titles displayed in English and Western European languages ISO 8859-1 (Latin 1) on the front panel and on-screen display
- SILENT CINEMA and Virtual CINEMA DSP
- Dialogue Lift for dialogue to screen center
- Preout terminals for front, center, surround and surround back, and dual mono subwoofer out
- 9 selectable subwoofer crossover frequencies
- Subwoofer phase select
- 8-channel or 6-channel external input
- Speaker A, B, A+B selection
- Preset remote unit

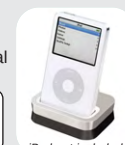
Yamaha Bluetooth® Wireless Audio Receiver

The YBA-10 Bluetooth Wireless Audio Receiver docks to the receiver and supports A2DP audio streaming, so users can enjoy music wirelessly from Bluetooth-enabled mobile phones, Windows PCs and Macs.



Yamaha Universal Dock for iPod

The optional Yamaha Universal Dock lets you connect your iPod to the receiver.



Main Specifications

Minimum RMS Output Power	
(8 ohms, 20 Hz–20 kHz, 0.06% THD)	
Front L/R Channels	95 W + 95 W
Center Channel	95 W
Surround L/R Channels	95 W + 95 W
Surround Back Channels	95 W + 95 W
Dynamic Power (1 kHz)	
8/6/4/2 ohms	130/165/195/240 W
Damping Factor	
(8 ohms, 20 Hz–20 kHz)	120 (speaker A)
Frequency Response	
10 Hz–100 kHz +0, -3 dB	
Total Harmonic Distortion (CD, Front Sp Out)	
(2ch Stereo, 50 W/8 ohms) 0.06%	
Signal-to-Noise Ratio (CD)	
100 dB (250 mV)	
Monitor Out Frequency Response	
Component Video Signal	
5 Hz–100 MHz -3 dB	
Dimensions (W x H x D)	
17 1/8" x 6 3/4" x 15 1/2"	
435 x 171 x 393 mm	
Weight	
26 lbs.; 11.8 kg	

Inputs	HDMI	2
	XM / SIRIUS Satellite Radio Terminal	1 / 1
	Dock Terminal for iPod / Bluetooth	1
	Optical Digital (Fixed and Assignable)**	3
	Coaxial Digital (Fixed and Assignable)	2
	S-Video**	5
	Analog A/V / Audio**	5 / 2
Others	Component Video (Fixed & Assignable)	3
	Multi-Channel External Input	8 ch

* Video Aux not assignable. ** Including front panel Video Aux terminals.

Outputs	HDMI	1
	Analog A/V / Audio	2 / 1
	S-Video	2
	Component Video Monitor	1
	S-Video / Composite Monitor	1 / 1
	Speaker (without subwoofer)	7 ch / 9 ter.
	Subwoofer	2
Others	Zone 2 Audio Out	1
	Remote In/Out	1 / 1
	Trigger Out	1

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